



THE FEBRUARY MEETING

This month we welcome the return of Tony Gilbey, G4YTG to the rostrum in the Marconi College, Arbour Lane, for a talk and forum on Amateur Radio Aerials.

Considering the size of ground and sky space associated with an average domestic dwelling as compared to the site of a commercial radio station, leads us to realise that the design and installation of Amateur Radio Aerials can only be a compromise!

For HF applications, Tony will describe some of the artificial methods of shortening and lengthening aerials to fit into a given space, these include Trap Dipoles and Multi-Dipoles.

For VHF applications, Tony will explain how Directors and Reflectors work to modify the radiation pattern of a Dipole, a tricky subject, often associated with the misleading statement "the effective gain of a beam aerial".

Tony will invite members to join in a forum with questions and personal experiences relating to their favourite types of aerials. The meeting opens at 7.30pm and we look forward to your company for an interesting evening.



DATES FOR YOUR DIARY

- 2 Feb. SOUTH ESSEX ARS RADIO RALLY - Canvey Is.
- 4 Feb. CLUB MEETING - "Amateur Aerials" by Tony, G4YTG
- 9 Feb. CAMBRIDGE & DARC RALLY - Addenbrooke's Hosp.
- 16 Feb. RSGB VHF CONVENTION - Sandown, Esher.
- 22 Feb. RAINHAM RADIO RALLY - Rainham Girls School.
- 4 March CLUB MEETING - "Digimodes" by B.A.R.T.G.
- 8/9 March LONDON AMATEUR R & C SHOW - Picketts Lock.

LAST MONTHS MEETING

Club Video Evening - report by Charles Shelton GØGJS

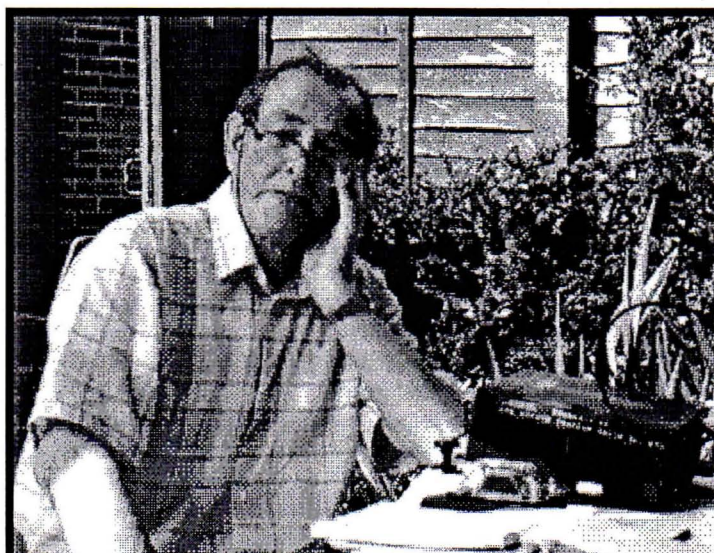
This annual event featured two videos, the first dealing with P&O's new cruise liner ORIANA from the viewpoint of functionality. Built in Germany and launched by Her Majesty The Queen in June 1995, the liner carries 1780 passengers and 760 crew. A tonnage of 69,000 is shifted by diesel engines which can develop up to 54,000 hp and her maximum speed is 25 knots. In continuous operation on the world cruise routes throughout the year, she never spends more than a few hours in port. Indeed, with a turn round time of only 11 hours in Southampton there is insufficient time to take on all supplies and so stores are despatched by other means to ports of call where visiting times are utilised for further replenishment.

P&O developed for ORIANA the Integrated Bridge System which they claim will be a model for future ships. On the bridge the Command, Navigation and Communications consoles, all computer based, derive and control the essential functions necessary to drive and operate the ship. A computer joystick operation can manoeuvre ORIANA in her own length and, assisted by three thruster jets in the bow and one in the stern of 1500 hp each, obviate the need for tugs in most harbour situations. Like a modern aircraft, she can be programmed with information from sensors - track log, compass, speed log, winds and tide, radar, GPS, waypoints - and could then navigate from port to port with the minimum of human intervention.

The Radio Room is no more. The Communications console on the bridge with its SATCOM and GMDSS systems handles navigation warnings, weather, security and distress situations. Down below a Communications Centre deals with commercial and personal communications and passengers can autodial home from their cabins via the satellite link - at £6 a minute. The Centre is also the ship's TV station which is responsible for piping programmes and information to all cabins.

A senior rank of Safety Officer has been created and much emphasis is placed on safety, particularly in respect of fire outbreaks. 5,200 sensors monitor all parts of the ship and are viewed on mimic panels so that trouble spots can be instantly identified.

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It is with great sadness that we record the passing of Harry Lowe, G2HPF who died peacefully at home on Sunday 5th January, at the age of 73 years.

Born in Norfolk, the son of a clergyman, Harry soon became interested in radio communication and as well as the long service he gave to Marconi's as an installation engineer for projects as far apart as Malaya, Hong Kong, Germany and the UK, he also enjoyed his involvement in Amateur Radio.

Harry's contributions to our Society cover many years, particularly in committees and field days where his knowledge as a First Class CW Operator provided not only valuable scoring but an inspiration to others to follow in the noble art.

In addition, Harry developed a deep understanding of computer programming from which he designed a very comprehensive logging system to record the large number of QSO's and QSL's accumulated from operating all the HF bands.

Music also gave Harry a great deal of pleasure, particularly in playing the electronic organ, a fine example of which he owned.

A message of condolence, on behalf of Society members was sent to Harry's wife Margaret and family.

He will be missed by all who had the good fortune to know him, especially for his daily presence on the 21 Net and the Tuesday evening 10 metre Club Nets.

COMMITTEE MEETING

The next Committee meeting will be held at 7.30pm on Wednesday 12th February, in Telford Lodge, you are welcome to join us.

THE "MARCONI" KITE - Tony, G4YTG

The kite that was used in the historic transatlantic wireless telegraphy experiment on December 12th 1901, was actually a LEVITOR.

The Levitor was patented by B.F.S. Baden Powell of the Scots Guards (Brother of the founder of the Scouting movement) in 1895 and was designed to be used in train for man lifting. It was never a very stable beast even when rigged with twin lines and the man being lifted furnished with a deployed parachute.

The Marconi team in Newfoundland were only there because the weather was windy and had already destroyed the structure supporting the aerial they intended to use at Cape Cod in the USA. Although they reputedly lost two or three kites, depending on whose account you read, I think the one that finally held up the aerial probably flexed evenly to produce dihedral and be a more stable lifter in the strong winds prevailing. The patent makes great import that the kite can be flown without the need for a tail but makes no mention of flexing of the cross spars.

Chelmsford Industrial Museum Service with the assistance of photographs and data from the Marconi archives commissioned Taylors Sail makers of Maldon to produce a replica and they used 1900 materials and methods that were appropriate. The cotton cambric sail material from a Lancashire mill was bleached brilliant white when delivered and was "authenticated" by a session in the washing machine with a few tea bags to a light beige colour before the kite was made.

Heavy 1.5" dia bamboo spars were used and the bridle, in hemp cord, was not fitted in a way which would present the kite to the wind.

During a visit to the Museum I was foolish enough to admire the kite and the way it had been made but say of course it would not fly without a "kite flyer" giving it some expert attention

After I got it home and undid the ties and bindings to remove the spars I found they were very tapered (1.5" to 0.5") left to right. They had to go!! New spars were constructed from pairs of bamboo garden canes tapered from 0.5" to 0.25" overlapped with the thick part at the ends to make a spar (from authentic material) which flexed uniformly either side of its centre. All three spars were replaced in this manner bound with bare copper wire ties at 6" intervals. The bridle was replaced using hemp and brass rings attached to the correct places. I am convinced the kite would have flown in a fair blow at this stage but would have sprung flat and spun uncontrollably when the wind lulled. To save this happening I had to cheat it and provide hemp cord and wooden adjusters in a bow string arrangement behind each cross spar.

It flew first time with no adjustments needed, stable as a rok (Rokkaku it now resembles) in any wind speed and can be pulled up in no wind at all.

I expect many of you saw the TV program "Making Waves" which had some great bits in it if you were not a kite flyer or radio communication buff and I am both!!

The kite spars would have doubled as scaffold poles to build a three up three down semi and the flyer did not understand how kites fly.

On the radio side, the receiver was not the right type to receive the signal being transmitted from Cornwall but would receive the kind of transmission sent out by the local broadcast services. Marconi did not have this problem (no other services).

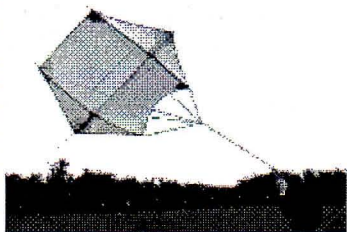
It is well known among Radio Communications people that Marconi could not have done what he thought he had done, transmitted a signal on an MF band (now used for LOCAL broadcasts with more power, better aerials and only giving a range of about 50 miles by day, 500 miles at night,) to Newfoundland.

Marconi's spark transmitter was running about 1800 watts with about 1000 of these transmitted on his MF frequency (around 500Kc's) the remaining 800 watts were "spurious" higher frequency signals in the yet to be discovered SW (Short Wave) band where the signals would "bounce" via the "skips" between the ionosphere and the earth. These were the signals that could easily make the distance and be received anywhere in the world.

By deliberately launching signals in the SW band the EKG's (Essex Kite Group), Alec, George, Bob and I could do it today using our own gear and kites and make it work!!

MEMBERS NEWS

This month the Society extends a welcome to Denis Falconer, a SWL, who joined at the last meeting.



LETTER TO THE EDITOR

Continuing the debate on whether or not to continue the annual junk sale, another point of view has been received. Ed:

Dear Roy,

I am writing in response to your request for views on the junk sale. I always enjoy these light hearted evenings. I am convinced that the monthly sales table and the annual junk auction perform a useful service for many members, even allowing for the deadly black box syndrome. I do not agree with Gwyn when he says that the monthly club sales dilute the performance of the junk sale. Do not let us discourage construction projects!

Perhaps Chairman John G8DET could provoke some reaction from members in one of his opening addresses.

Let us consider ways of maximising income from both these activities by sensible pricing, packaging and minimum opening bids. I am ready to help with packaging, storing and any associated chores.

Meanwhile, good luck to Jan G7UVP and Chris G0IPU for their initiative in taking a table at the Canvey Rally on Sunday, where the rest of the surplus equipment from the last junk sale will, hopefully, be sold.

Geoff, G7KLV

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Crew drills with the latest fire fighting equipment are regularly held and patrols throughout the vessel are the norm.

The engine room is monitored by engineers but not manned. Control consoles, VDUs and CCTV cameras view and describe the functioning and behaviour of the two pairs of 'father and son' engines which at 426 rpm drive through a 3.5:1 reduction gear box to the prop shaft; four auxiliary engines are available each one capable of providing enough power to light a town housing 40,000 people. The engines can be directly controlled from the bridge. The ship has two rudders which can be operated in either a synchronous or asynchronous mode.

A ships' hospital able to cope with most modern traumas, is staffed by well qualified people, but major surgery is rare due to the frequent port calls that are made and the helicopter rescue services that are now available in most parts of the world. Two passengers were taken off by tender in a Norwegian fjord and taken to hospital in Bergen, during the writer's holiday voyage last June.

A desalinisation plant can produce 600 tons of fresh water daily and the four swimming pools and five Jacuzzis are among the beneficiaries. Nine lifts serve the eleven passenger decks and there are two main restaurants and a very popular conservatory. A cinema for three hundred people and a state of the art theatre seating eight hundred, plus nine bars, a night club, discotheque, superb library, hi-tech gymnasium, sauna, card room, writing room, laser skeet shooting facility, casino, beauty salon, shops - provide something which is likely to match most people's requirements be it for a restful holiday or a swinging time!

The second video dealt with the production lines of the Crompton factories during the early 1950's. A third video which was concerned with steam trains in the Isle of Man was not shown due to the late hour and inclement weather. It is hoped to screen it at a later date.

Our thanks to Geoff G7KLV for reviewing the material which provided an interesting evening.

CORRECTION

Although Compuserve have offered to personalise the E-mail addresses for their members, my alternative address published last month "Roy_Martyr@compuserve.com", along with many others, have not been activated, so please continue to use the original as shown below.

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